

We claim:

- 1 1. A smart card comprised of:
- 2 a. a first user data storage device including a memory device and storing:
- 3 i. a first set of user data;
- 4 ii. a first encryption key for encrypting at least part of said first set of user
- 5 data;
- 6 b. a first interface circuit coupled to said memory device granting conditional
- 7 access to data therein using an appropriate data exchange protocol and only
- 8 when a second personal data storage device is operatively coupled to said first
- 9 personal data storage device;
- 10 c. a second interface circuit coupled to said memory device and providing
- 11 communications access to a second personal data storage device.
- 1 2. The personal data storage apparatus of claim 1 further comprised of a processor,
- 2 operatively coupled to said memory device and to said first and second interface
- 3 circuits.
- 1 3. The personal data storage apparatus of claim 1 wherein said second personal data
- 2 storage device is operatively coupled to said first personal storage device using a
- 3 mechanical coupling .

1 4. The personal data storage apparatus of claim 3 wherein said mechanical coupling  
2 is a connector.

1 5. The personal data storage apparatus of claim 1 wherein said second personal data  
2 storage device is operatively coupled to said first personal storage device using a  
3 wireless connection.

1 6. The personal data storage apparatus of claim 5 wherein said wireless connection  
2 is a radio link.

1 7. The personal data storage apparatus of claim 1, where an agent of the issuer of the  
2 personal data storage apparatus can recreate the user data from a single part of the  
3 personal data storage apparatus.

1 8. A personal data storage apparatus comprised of:  
2 a. a first personal data storage device comprising:  
3 i. a first memory device storing:  
4 1. a first set of user data;  
5 2. a first encryption key for encrypting at least part said first set of  
6 user data;  
7 ii. a first interface circuit coupled to said memory device granting  
8 conditional access to data therein using a predetermined protocol and

9 only when a second personal data storage device is operatively  
10 coupled to said first personal data storage device;  
11 iii. a second interface circuit coupled to said memory device and  
12 providing access to a second personal data storage device;  
13 b. a second personal data storage coupled to said first personal data storage  
14 device and being comprised of:  
15 i. a second memory device storing:  
16 1. a substantially duplicate copy of said first set of user data;  
17 2. a second encryption key for encrypting at least part said first set of  
18 user data;  
19 ii. a second interface circuit coupled to said memory device granting  
20 conditional access to data therein using a predetermined protocol and  
21 only when said second personal data storage device is operatively  
22 coupled to said first personal data storage device;  
23 whereby user data in either said first or second personal data storage device is  
24 accessible and usable only when said first and second personal data storage devices are in  
25 communication with each other.

1 9. The personal data storage apparatus of claim 8 wherein said first personal data  
2 storage device is further comprised of a processor, operatively coupled to said  
3 first memory device and to said first and second interface circuits.

1 10. The personal data storage apparatus of claim 9 wherein said second personal data  
2 storage device is operatively coupled to said first personal storage device using a  
3 mechanical connector.

a 1 11. The personal data storage apparatus of claim 8 wherein said second personal data  
2 storage device is operatively coupled to said first personal storage device using a  
3 wireless connection.

1 12. The personal data storage apparatus of claim 8 wherein said wireless connection  
2 is a radio link.

1 13. The personal data storage apparatus of claim 8, where an agent of the issuer of the  
2 personal data storage apparatus can recreate the user data from a single part of the  
3 personal data storage apparatus.

1 14. A method of securing access to data stored in a personal data storage device  
2 comprised of the steps of:  
3 a. storing personal data in first and second data storage devices that are capable  
4 of being operably coupled to each other;  
5 b. encrypting said personal data in a first data storage device using a first  
6 encryption key and encrypting it in said second data storage device using a  
7 second encryption key;

8 c. granting access to said personal data in either said first data storage device or  
9 said second data storage device only when said first and second data storage  
10 devices are operatively coupled together.

1 15. The method of claim 14 wherein said step of granting access to said personal data  
2 in either said first data storage device or said second data storage device when  
3 said first and second personal data storage devices are operatively coupled  
4 together is comprised of the step of granting access when said first and second  
5 personal data storage devices are coupled together through at least one of either a  
6 wireless data link or a mechanical connector.

1 16. The method of claim 14 wherein data stored in said first storage device can be  
2 recovered from data stored in said second storage device.

1 17. The method of claim 14 wherein said first and second encryption keys are the  
2 same.